

In The Specification:

Kindly amend the paragraph beginning on page 7, line 26 as follows:

The process 10 also includes a camera model or sensor model, which is generally indicated by reference number 14. The sensor model 14 is a mathematical representation of a 3-D image-capturing device that includes descriptions of or parameters regarding visibility, resolution, field of view, focal length and depth of field. The sensor model 14 may also mathematically represent more or additional descriptions or parameters. In the preferred embodiment, only a single camera is used, however, it should be understood that multiple cameras or sensors could also be utilized and [controller] controlled. Further, any commercially available camera or sensor having known parameters could be utilized.

Kindly amend the paragraph beginning on page 10, line 9 as follows:

Once the tessellation step 24 of the CAD surfaces have been completed and the surface is composed of triangular facets, a plurality of flat patches are grown out of the tessellated surface, as generally indicated by reference number [20] 26. The flat patches are formed by aggregating triangular facets that meet the “flat patch” criteria. The flat patch criteria imposes a normality requirement on any given flat patch that can be arbitrarily set to meet the area scanners incident angle requirement, i.e. light rays striking the measured surface must not have too high an angle of incidence. The flat patch criteria allows the CAD surface to be broken up into patches that do not have excessive curvature and do not occlude, i.e. have obstruction of some parts of the surface by others. While triangulation is preferably utilized, other ways of partitioning or subdividing the surface may be utilized.

Kindly amend the paragraph beginning on page 13, line 10 as follows:

To ensure that the image is in focus, the depth of field information of the sensor model can be used to bracket a segment on the

line of sight, within which all locations are acceptable. To bracket the line of sight, the sensor planner 16 determines the closest sensor position that includes the entire flat patch, as generally indicated by reference number 54. Also, the most distant sensor position having sufficient resolution is determined, as generally indicated by reference [n umber] number 56. The sensor planner 16 then determines whether there are any sensor positions that satisfy the above requirements, as generally indicated by reference number 58. The sensor planner 16 then determines whether a solution exists, as generally indicated by reference number 60. If a solution exists, the solution is output, as generally indicated by reference number 62. If, however, no solution exists, such as because the location determined by the resolution criteria falls outside the range, then the flat patch may have to be further reduced in size, as generally indicated by reference number 64. As shown generally, the illustrative flat patch is split into a left patch 66 and a right patch 68. The same process described above would then need to be repeated for each flat patch 66, 68 to determine the appropriate sensor position and orientation. It should be understood that a flat patch can be subdivided into more than two sections. With this method, a set of view locations and orientations of the 3-D sensor is gained.